rough mopping on the surgeon's part, and permits absolutely no treatment by the patient. Often one dressing of the ear will be sufficient to absorb all the secretion thrown into the auditory canal. After opening the mastoid cavity he prefers to keep the wound open in its outer portions in order to inspect the deeper parts as long as he may deem necessary.

LEUTERT, of Halle, stated that in Schwartze's clinic syringing is not done in acute otitis media. It is best, however, to keep the auditory meatus closed in order to prevent entrance of air.

BRIEGER, of Breslau, is in favor of dry cleansing with sterilized cotton-mops in acute otitis media. A tampon in the auditory canal cannot in his opinion lead to retention of pus; but retention of pus may easily ensue in the mastoid wound, if closure on the outer side is allowed before healing from the bottom takes place. Hartmann, of Berlin, has long ceased to employ inflation in acute otitis media, and has spoken against irrigation of the wound after mastoid chiselling. A bandage should be retained for a long period only in an aseptic wound, while in septic wounds the dressings should be changed as often as possible. Long-continued tamponing delays healing.

NOLTENIUS, of Bremen, does not think that tamponing the auditory canal with absorbent cotton or gauze after paracentesis will lead to retention of pus; after mastoid operations he considers it important to effect healing from the bottom.

REINHARD, of Duisburg, asserts that in the Schwartze-school irrigation is not practised in acute suppurations.

WALB, of Bonn, considers inflations by either Politzer's method or the catheter or any other method as not only useless but as really dangerous, as by such means pus may be forced into parts of the middle ear previously unaffected, as he pointed out six years ago, in a meeting of aurists in Heidelberg, and was unanimously indorsed by all present.

VARIOUS METHODS OF OPERATING IN OTITIC BRAIN-COMPLICATIONS.

At the fourth meeting of the German Otological Society, May, 1895 (*Archiv f. Ohrenh.*, Sept. 1895), **KOERNER**, of Rostock, and **JANSEN**, of Berlin, presented reports on the above-named subject. Koerner first draws attention to the fact that every intracranial suppuration does not always produce symptoms from which safe conclusions can be drawn as to its location. Autopsies, however, have shown that nearly all otitic brain-abscesses are situated near the spot of original suppuration in the ear or in the petrous bone, and often in demonstrable physical communication with it. Since nearly always when the abscess is in the temporal lobe the tegmen tympani et antri is diseased and the abscess lies with its fundus against the dura, it is possible, as Koerner claims he first showed, to unite the emptying of the abscess with the removal of the diseased bone in the subjacent region. In this way, he says, Macewen has since operated. The latter has exposed the base of the temporal lobe by removing the upper wall of the auditory canal and the tegmen tympani, and by that channel has emptied the abscess. In order to be sure of removing all necrotic brain-tissue he makes a counter-opening in the squama close above the posterior wall of the auditory canal. Von Bergmann has recently adopted these procedures, and he also, after partial removal of the auricle and turning it downward, opens the middle fossa of the skull immediately over the bony auditory canal, pushes the dura upward, and reaches easily in this way the tegmen tympani. He can then empty through the middle fossa of the skull the abscess in the temporal lobe, and through the same space by chiselling outward and downward he can remove the primary centres of disease in the temporal bone.

The new method of exposing intracranial diseases of otitic origin, by following in operating the path by which the infection has passed to the brain, enables the surgeon, when cleaning out the primary focus of disease in the middle ear, to expose the point through which the inflammation in the bone of these parts has invaded the cranial cavity. He can thus demonstrate the presence of intracranial inflammations and render them innocuous before they have induced threatening and unfavorable symptoms.

Universal harmony of opinion reigns regarding the manner and principle of operating in otitic brain-abscesses, but the views respecting after-treatment are very diverse.

Macewen has drained brain-abscesses by means of absorbable drainage-tubes, permitting healing to take place beneath one dressing. Others pack the cavity loosely. Eulenstein has found that tight tamponing may cause fresh brain-symptoms. In sinuous cavities careful irrigation under artificial light is necessary, in order to prevent retention of pus, etc. Retentions often appear to be confounded with "second" abscesses; at least in autopsies on those who have been operated upon a "second" abscess is often found very near the first, while in those who have died without an operation, as a rule, *only one abscess* is discovered. "The search after and evacuation of otitic brain-abscesses by the same route through which pus from the diseased ear or temporal bone forced its way to the brain-substance" are the valuable result of the united efforts of general and aural surgeons.

JANSEN, of Berlin, based his report on the experiences gained in the Berlin ear-clinic. During the last few years, when he excepts cases of meningitis, he has found in 148 intracranial suppurations, 108 extradural abscesses, 35 cases of thrombosis of the lateral sinus, and 5 cases of abscess of the brain. 96 times the suppurations lay in the posterior fossa of the skull, 38 times in the middle fossa, and 14 times both fossæ were invaded. The clinic-books show 58 cases of sinus-thrombosis and 16 cases of otitic brain-abscess: 9 times in the cerebellum and 7 times in the temporal lobe.

Opening the cranial fossa has been performed, always in connection with chiselling open the mastoid cavity for the puropse of exposing perisinuous abscesses. In some instances this end has been obtained by opening the middle cranial fossa according to the suggestion of v. Bergmann described above. In many cases, viz., in those in which the mastoid abscess and the pus-focus in the sinus formed one cavity, this has been opened without further operation. When such has not been the form of the abscess the following method has been adopted: After opening the mastoid and the antrum, the posterior wall of the mastoid cavity has been chiselled away until the anterior lateral wall of the sinus has appeared. Exposure of the sinus must be carried forward until healthy tissue is reached; of course, within limits allowed by the topographical relations. Deep-lying suppurations in the cranial cavity are reached only after removal of the posterior wall of the mastoid portion in its